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APPLICATION NUMBER	FILING DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NO.
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0651/0722

EXAMINER

DATE

ART UNIT

PAPER NUMBER

2757

DATE MAILED:

07/28/95

This is a communication from the examiner in charge of your application.
COMMISSIONER OF PATENTS AND TRADEMARKS

OFFICE ACTION SUMMARY

☒ Responsive to communication(s) filed on 5-17-99

☒ This action is FINAL.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 D.C. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) 1-5, 7-15, 17-25, 27-31 is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 1-5, 7-15, 17-25, 27-31 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
☐ received.

☐ received in Application No. (Series Code/Serial Number) _____

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☐ Notice of Reference Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

Dung C. Dinh
Primary Examiner

-- SEE OFFICE ACTION ON THE FOLLOWING PAGES --

DETAILED ACTION

Applicant's arguments filed 5/17/99 have been fully considered but they are not persuasive.

Applicant argued that Verhoeckx does not have the limitation "computer network". The "computer network" as recited in the claims is merely nominal recitation. There is no functional relationship tying the elements of the claims to the "computer network". The recited elements would function exactly the same way over a UTP path separate from that of a "computer network". Hence, integrating the video UTP path with an existing UTP computer network path would have been a matter of design choice.

"use of one piece construction instead of reference structure is matter of obvious engineering choice" *In re Larson*, 144 USPQ 347 (CCPA 1965).

Applicant argued that Verhoeckx can not transmit video image in "color" at "greater than 20 frames per second". The argument is not persuasive because that is a technological limitation at the time of Verhoeckx invention. At the time of the present invention, it is well within the level of one of ordinary skill in the art to assemble off-the-shelf components that would transmit color video at greater than 20 frames per second over UTP wires. It is known in the art at the time of the

invention to have color video. It is also known that smooth reproduction of video requires between 15 to 30 frames per second.

The circuitry for transmitting color video at greater than 20 frames per second is not Applicant invention because the specification does not disclose in any detail of the circuitry or how applicant was able to achieve color video at greater than 20 frames per second. The specification merely discloses that it is desirable to have color video over 20 frames per second.

"it is not inventive to discover the optimum or workable ranges by routine experimentation." *In re Aller* , 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955). Only if the "results of optimizing a variable" are "unexpectedly good" can a patent be obtained for the claimed critical range. *In re Antonie* , 559 F.2d 618, 620, 195 USPQ 6, 8 (CCPA 1977); see also *In re Dillon* , 919 F.2d 688, 692, 16 USPQ2d 1897, 1901 (Fed. Cir. 1990) (in banc). Furthermore, it is well settled that unexpected results must be established by factual evidence. "Mere argument or conclusory statements in the specification does not suffice." *In re De Blauwe* , 736 F.2d 699, 705, 222 USPQ 191, 196 (Fed. Cir. 1994); see also *In re Soni* , 54 F.3d at 750, 34 USPQ2d at 1687.

As per the 103 argument, the argument is not persuasive for the same reason above as stated for the "color video at greater than 20 frames per second" limitation.

The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 12-14, 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Verhoeckx et al. US patent 4,005,265.

As per claim 1, Verhoeckx teaches a video communication system comprising:

at least one analog video-signal source [abstract line 6];

at least one video display device [apparent];

at least one control communication component configured

to produce digital control-signals [abstract line 5 - signaling signals];

an unshielded twisted pair of wires [telephone wire]

defining a UTP communication path [col.20 line 20+],

arranged for video-signal transportation,

wherein the system is configured to

multiplex analog video-signals originate at one of the video-signal sources with digital controls from of the control communication component [lines 19-27 'via a single pair of cable'];

transmit the multiplexed signals along the UTP communication path to the at least one video display devices [apparent];

use the control signals to control reproduction of video images, based on the video signals, on the one of the video displays [col.5 lines 17-35].

Verhoeckx teaches the color [col.3 line 9] video images is reproduced at greater than 20 frames per second [col.7 line 32: 25Hz].

Verhoeckx does not teach the UTP wire being included as part of a computer network. Verhoeckx teaches using the existing UTP wire of a telephone network. The "computer network" as recited in the claim is merely nominal recitation. There is no functional relationship tying the elements of the claims to the "computer network". The recited elements would function exactly the same way over a UTP path separate from that of a "computer network". Hence, integrating the video UTP path with an existing UTP computer network path would have been a matter of design choice. It would have been obvious for one of ordinary skill in the art to apply Verhoeckx teaching in a computer network because it would have enabled video transmission over existing paths and reduced the need to run new wires.

As per claims 12 and 21, they are rejected under similar rationale as for claim 1 above,

As per claims 13 and 14, Verhoeckx teaches multiplexing the audio and switching signal onto the UTP communication path [col.3 lines 19-27].

Claims 21-25, 1-5, 12-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tompkins et al. US patent 4,847,829 and further in view of Verhoeckx et al US patent 4,005,265.

As per claim 21, Tompkins teaches

A video communication system for operation with an infrastructure including

at least one analog video-signal source [fig.2 camera];

at least one video display device [fig.2 view finder 14]; and

coaxial wire defining a communication path arranged for video signal transportation [col.3 lines 10-20],

the system comprising:

(a) at least one control communication component [col.2 line 67 'controller'] configured to, produce digital control-signals [line 57,68 'data communication']; and

wherein the system is configured to

- (i) multiplex [col.3 lines 10-28]
 - (1) analog video-signals,
originating at a video-signal source,
 - (2) with digital control-signals
from one of the control communication
components,
- (ii) transmit the multiplexed signals
 - (1) along the communication path;
 - (2) to at least one of the video display
devices;

Tompkins does not specifically teach using twisted pair communication path for transmission of the video. Tompkins preferred embodiment uses coaxial cable [col.3 lines 10-20]. Verhoeckx teaches transmission of video signal over existing twisted pair wire to save cost [col.1 lines 20-25]. Hence, it would have been obvious for one of ordinary skill in the art at the time of the invention to combine the teaching of Verhoeckx with Tompkins to enable transmission of video conference signal over twisted pair instead of coaxial cable because it would have reduces cost. Verhoeckx teaches using digital control signal to control reproduction of video images at one of the video display devices [Verhoeckx col.3 lines 18-27].

Tompkins teaching using NTSC format. Hence it is apparent that video is color at frames rate greater than 20 frame/sec.

erhoeckx does not teach using the UTP path of an existing computer network. Verhoeckx uses the existing UTP wire of a telephone network. The "computer network" as recited in the claim is merely nominal recitation. There is no functional relationship tying the elements of the claims to the "computer network". The recited elements would function exactly the same way over a UTP path separate from that of a "computer network". Hence, integrating the video UTP path with an existing UTP computer network path would have been a matter of design choice. It would have been obvious for one of ordinary skill in the art to apply Tompkins teaching to transmit over UTP wire of a computer network because it would have enabled video transmission over existing paths and reduced the need to run new wires.

As per claim 22, Tompkins teaches multiplexing analog audio onto the communication path [col.3 lines 10-20].

As per claim 23, Tompkins teaches controlling a switch to route the multiplexed signal along the communication path [col.3 lines 29-42].

As per claim 24, Tompkins teaches a server controlling the switch [col.3 lines 29-42 "network master"].

As per claim 25, it is inherent in the operation of Tompkins teaching that audio/video from a first station is configured to reproduce at a second workstation.

As per claims 1-5, and 12-15, they are rejected under similar rationale as for claims 21-25 above.

Claims 27, 7, 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tompkins & Verhoeckx et al and further in view of Ramanathan "Optimal communication Architectures for Multimedia Conferencing in Distributed Systems".

As per claim 27, Tompkins does teach combining video images to produce a mosaic image. Tompkins only enable one video source to be display at a time. Ramanathan teaches to create mosaic video image to reduce bandwidth to enable participant to see multiple video stream simultaneously in a teleconference system. It would have been obvious for one of ordinary skill in the art at the time of the invention to provide mosaic creation means with Tompkins system because it would have enable the participant to see more than one of the other participants in the conference and enable better interaction of the participants.

As per claims 7 and 17, they are rejected under similar rationale as for claim 27 above.

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Claims 28, 8, 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tompkins & Verhoeckx & Ramanathan et al and further in view of Rangan et al. "Software Architecture for Integration of Video Services in the Etherphone System".

As per claim 28, Tompkins does not teach a graphical user interface to enable selection of a user and the conference type. It is known in the art to provide selection of user and conference type [see Rangan et al.]. It would have been obvious for one of ordinary skill in the art to provide graphical interface for the selection of user and conference type because it would have enable a user friendly and flexible initiation of a conference call.

As per claims 8 and 18, they are rejected under similar rationale as for claim 28 above.

Claims 29-31, 9-11, 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tompkins & Verhoeckx & Ramanathan et al and further in view of Stefik et al. "Optimal Communication Architectures for Multimedia Conferencing in Distributed Systems".

As per claim 29, Tompkins does not specifically disclose a data conferencing along with the audio/video conferencing.

Tompkins discloses that the system is capable of transmitting baseband data signals [col.6 lines 40-63] and can function in conjunction with standard data network (LAN). It is known at the time of the invention to provide data conferencing for collaboration and problem sharing over a data network [see Stefik et al.]. It would have been obvious for one of ordinary skill in the art at the time of the invention to provide a data collaboration tool with Tompkins system because it would have enable the user to collaborate and share data while using the audio/video conferencing.

As per claim 30, it would have been obvious for one of ordinary skill in the art to have the data conferencing signal and video display on separate windows on the display device because it would have enable the user to have multiple view simultaneously. At the time of the present invention, it is known to have Operating System (e.g. Microsoft Windows, X-window, etc.) with built in capability for displaying multiple application windows. Hence, the user of this workstation inherently has the capability for displaying the data conferencing and audio/video conferencing in separate windows.

As per claim 31, it is apparent that the system as modified would display the data conference signal interactively at least

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two display devices [at the initiator and at least one other receiver].

As per claims 9-11, and 19-20, they are rejected under similar rationales as for claims 29-31 above.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for response to this final action is set to expire THREE MONTHS from the date of this action. In the event a first response is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event will the statutory period for response expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dung Dinh whose telephone number is (703) 305-9655. The examiner can normally be reached on Monday-Thursday from 7:00 AM - 4:30 PM. The examiner can also be reached on alternate Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenton Burgess can be reached at (703) 305-4792.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-9600.

Any response to this final action should be mailed to:

Box AF

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or faxed to:

(703) 308-9051, (for formal communications; please
mark "EXPEDITED PROCEDURE")

(703) 305-9731 (for informal or draft communications,
please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park
II, 2121 Crystal Drive, Arlington. VA., Sixth Floor
(Receptionist).

A handwritten signature in cursive script, appearing to read "Dung Dinh", is written over a horizontal line.

Dung Dinh
Primary Examiner
July 22, 1999